

In order to qualify for the three year voluntary relocation period, a Public Safety system must meet the following criteria:

- *First*, the facility must be licensed for police, fire, or emergency medical operations to an entity meeting the Part 90 Public Safety eligibility requirements.<sup>85</sup>
- *Second*, the "majority" of the communications carried on the facility must be used for police, fire, or emergency medical services operations involving safety of life and property.

The FCC has stated, however, that some other licensees providing public safety services may request waivers to have their systems treated as Public Safety systems for purposes of the transition rules. Notwithstanding the longer voluntary negotiation period, however, the FCC has urged qualifying Public Safety licensees to attempt to negotiate relocation settlements with new PCS licensees and manufacturers and to avoid delaying the initiation of PCS operations.

#### **D. The Voluntary Negotiation Process**

The FCC will release a public notice that officially starts the voluntary negotiation period for the 2 GHz bands. The FCC has indicated that it will issue this notice approximately when it begins accepting applications for new PCS licenses. During this period, a microwave licensee:

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<sup>85</sup> See Section 90.19 (Police Radio Service), Section 90.21 (Fire Radio Service), Section 90.27 (Emergency Medical Radio Service, and Subpart C of Part 90 (Special Emergency Radio Services).

- *May negotiate a relocation agreement with new PCS licensees and unlicensed PCS device manufacturers, but is not required to do so;*
- *May continue to operate its facilities protected from any electrical interference from the new PCS transmitters; and,*
- *May continue to operate its facilities without protecting new PCS systems from interference.*

If a microwave licensee volunteers to relocate during this period, the negotiated relocation could include:

- A monetary "premium" for early relocation;
- A tax certificate from the FCC deferring capital gains tax on any funds received that are used for the purchase of "like kind" communications facilities; and,
- Any division of responsibilities ranging from complete turnkey replacement of its facilities to simple monetary payments for the cost to compensate the microwave licensee for its own relocation efforts.

The voluntary negotiation period ends when the minimum period has expired and a PCS operator sends the microwave licensee a written request to relocate.

## **E. The Mandatory Negotiation Process**

After expiration of the minimum voluntary negotiation period, a new PCS licensee or UTAM can initiate the mandatory negotiation period by mailing a microwave licensee a written request to relocate. The mandatory relocation period then lasts for one year. During this period, the microwave licensee:

- *May* continue to operate its facilities protected from any electrical interference from the new PCS transmitters;
- *May* continue to operate its facilities without protecting new PCS systems from interference; but,
- *Must* negotiate in good faith with new PCS licensees for relocation.

Like settlements entered into in the voluntary negotiation period, any division of relocation responsibilities can be accommodated during the mandatory negotiation period and microwave licensees will qualify for tax certificates.

Good faith bargaining is required by all parties during the mandatory negotiation period. The FCC has indicated that it does not want all relocation disputes brought before it and that only in rare circumstances would it expect the one-year mandatory negotiation period to conclude without an agreement to relocate. The FCC has stated that willingness to participate in and comply with decisions rendered through Alternative Dispute Resolution ("ADR") techniques, such as mediation and arbitration, are evidence that parties are bargaining in good faith. If a microwave licensee does not bargain in good faith, the FCC has indicated that it is willing to mandate less than complete cost compensation for involuntary relocation or, in egregious cases, it may force microwave licensees to relocate without any cost compensation whatsoever.

## **F. Involuntary Relocation**

If mandatory negotiation is unsuccessful, microwave licensees can be involuntarily relocated. In order to obtain involuntary relocation, the PCS entity seeking relocation must:

- **Guarantee payment of all costs of relocating to a comparable facility, including all engineering, equipment, and site costs and FCC fees, as well as any reasonable additional costs;**
- **Complete all activities necessary for placing the new facilities into operation, including engineering and frequency coordination; and,**
- **Build and test the new microwave (or alternative) system.**

In addition, the FCC has enacted other protections for microwave licensees, including:

- **A microwave licensee is not required to relocate until the alternative facilities are available to it for a reasonable time to make adjustments, determine comparability, and to ensure a seamless transition to the new facilities.**
- **If, within a period of one year after relocation, the relocated microwave licensee demonstrates that the new facilities are not comparable to the original facilities, the PCS licensee or device manufacturer may remedy the defects or pay to relocate the microwave licensee back to its former (or other equivalent) 2 GHz band frequencies.**

Comparable facilities "must be equal to or superior to existing facilities." Relevant considerations to the FCC's determination of comparability include comparisons of system reliability, capacity, speed, throughput, overall efficiency, and interference protection.

If a licensee is relocated pursuant to involuntary relocation procedures, it is entitled only to reasonable cost compensation. Some of the costs likely to be incurred in relocating a microwave link to a higher microwave band include: the cost of new transmitter equipment, the cost of frequency coordination, engineering costs (design, installation, and testing), FCC filing fees, application preparation costs, and zoning permit costs. In addition, since the PCS operator seeking involuntary relocation must construct and test alternative facilities at its own expense -- or guarantee the costs of constructing and testing alternative facilities -- prior to

seeking involuntary relocation, the extent of cost compensation may be limited to the administrative costs of switching over to the new facilities. These alternative facilities could include microwave systems operating in the 4 GHz, 6 GHz, or 11 GHz spectrum bands, microwave systems operating in the nearby 1.7 GHz federal government spectrum band, satellite links, or fiber-optic or wired cable facilities. As an incentive to seek negotiated settlements, the FCC also will not issue tax certificates to microwave licensees subject to involuntary relocation.

New PCS licensees may also seek "in-band" relocation for microwave licensees. A microwave licensee that is relocated in-band is merely retuned to operate on a different microwave channel within the 2 GHz band. Because some frequencies in the 2 GHz bands may be available that would allow a microwave licensee to continue to operate without causing or receiving interference to or from a PCS system, in-band retuning may offer a low-cost solution to spectrum sharing problems. This procedure is only available with the consent of the microwave operator; the entity seeking retuning; and the entity that controls the rights to the frequency that the microwave licensee will use once retuned. However, a retuned microwave link may be relocated out of the 2 GHz band at a later date.

## **VIII. CONCLUSION**

PCIA has produced this handbook to assist its members and others interested in applying for PCS authorizations and complying with applicable obligations upon the grant of a license. This area of regulation, however, is still in a considerable state of flux as the FCC continues to refine the applicable regulatory policies. While opportunities are plentiful

in the PCS arena, potential applicants must be sure they have a full understanding of applicable requirements.

## **APPENDIX A**

### **Summary of FCC Forms and Fees**

At the present time, only three forms are prescribed for use under Part 24 of the Commission's Rules: the "short form" FCC Form 175; the "long form" FCC Form 600; and the FCC Form 159 fee remittance form:

- The FCC Form 175 is filed by applicants seeking to participate in auctions for PCS spectrum. The filing location and specific features for the FCC Form 175 may vary with each auction. Applicants should obtain a bidder information packet from the FCC prior to each auction to ensure that they are apprised of the latest information regarding the FCC Form 175. The FCC has indicated that microfiche copies of the form are required, regardless of the length of the filing.
- The FCC Form 600 is filed by auction winners to comply with statutory requirements to obtain a PCS license. The FCC has waived some of the requirements in the FCC Form 600 for auction winners (see attached public notice). Applicants should be aware, however, that the FCC Form 600 is still relatively new and may undergo further modifications.
- The FCC Form 159 is used for all payments made to the Commission, including regulatory fee payments under Section 1.1154 of the Commission's Rules.

Copies of the current versions of each form are attached for informational purposes.

The FCC has not yet prescribed forms or fees for transfers of control or assignment of PCS systems. Licensees seeking to transfer control of or assign PCS systems should contact the FCC's Wireless Telecommunications Bureau to determine appropriate filing procedures and fees. Current copies of FCC forms can be obtained by calling the FCC Forms Distribution hotline (202) 632-7000.

Federal Communications Commission  
Washington, DC 20554

**Application to Participate in an FCC Auction**  
(Read Instructions on Back Before Completing)

Special Use	
FCC Use Only	

OMB Approval 3080-0600  
Expires 4/30/97  
Estimate Average Burden  
Per Response: 30 Minutes

1. Applicant

8. Applicant Classification: ☐ Individual ☐ Partnership  
☐ Trust ☐ Corporation  
☐ Other \_\_\_\_\_

2. Mail Address (No P.O. Boxes)

9. Preference Type:  
☐ Rural telephone company  
☐ Minority owned small business  
☐ Woman owned small business  
☐ Small Business  
☐ None of the above

3. City

4. State

5. Zip Code

6. Auction Number

7. FCC Account Number

10. Preference Claimed:  
☐ Yes ☐ No

11. Markets and Frequency Blocks for which you want to bid. If more than 5 markets, use supplemental form (FCC 175-S).

Market No.

Frequency Block No.

1 2 3 4 5 6 7 8 9 10 11

(a)											
(b)											
(c)											
(d)											
(e)											

☐ Check here if supplemental forms are attached. Indicate number of supplemental forms attached: \_\_\_\_\_

12. Person(s) authorized to make or withdraw a bid (Typed/Printed Name)

(a)	(b)	(c)
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**Certification:** I certify the following:

- (1) that the applicant is legally, technically, financially and otherwise qualified pursuant to 308(b) of the Communications Act and the Commission's Rules and is in compliance with the foreign ownership provisions contained in Section 310 of the Communications Act.
- (2) that the applicant is the real party in interest in this application and that there are no agreements or understandings other than those specified in this application (see instructions for certification), which provide that someone other than the applicant shall have an interest in the license.
- (3) that the applicant is aware that, if upon Commission inspection, this application is shown to be defective, the application may be dismissed without further consideration, and certain fees forfeited. Other penalties may also apply.
- (4) that the applicant has not entered into and will not enter into any explicit or implicit agreements or understandings of any kind with parties not identified in this application regarding the amount to be bid, bidding strategies or the particular license on which the applicant or other parties will or will not bid.
- (5) that the applicant, or any party to this application, is not subject to a denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988.
- (6) that, if a preference(s) is claimed in block 10, the applicant is eligible to receive a preference(s) under Part I of the Commission's Rules.

I declare, under penalties of perjury, that I am an authorized representative of the above-named applicant for the license(s) specified above, that I have read the instructions and the foregoing certification and all matters and things stated in this application and attachments, including exhibits, are true and correct.

Typed/Printed Name of Person Certifying	Title of Person Certifying	Date
Signature of Person Certifying	Contact Person	Telephone No.



## Instructions

**Item 1. Applicant Name:** Enter the legal name of the person or entity applying to participate in an auction. If other than an individual, insert the exact name of the entity as it appears on the legal document(s) establishing the entity such as the Articles of Incorporation.

[NOTE: Applicants who have entered into an arrangement(s) of any kind relating to the license(s) specified in this application must provide additional information. See certification instructions below.]

**Item 2. Applicant Mailing Address:** Enter the street address to which the entity wants future correspondence relating to this application to be mailed. Indicate street numbers or rural route numbers as appropriate.

**Item 3. City:** Enter the city name for the applicant mailing address.

**Item 4. State:** Enter the two-letter state abbreviation for the applicant address.

**Item 5. ZIP Code:** Enter the ZIP Code for the applicant address.

**Item 6. Auction Number:** Enter the appropriate auction number. This number will be supplied by the Commission in the Public Notice announcing the auction.

**Item 7. FCC Account No.:** Enter your personal identification number. This number must consist of ten digits. You have two options to create this FCC Account Number. Option 1-you may use your taxpayer identification number (TIN) with a prefix of "0", i.e., 0123456789. Option 2-you may use your ten-digit telephone number (i.e., 5552345678). You should use this same number when submitting additional information/material regarding this application, including any required fees submitted to the Commission on FCC 159, FCC Remittance Advice, (i.e., use the same number for this form and the FCC Account Number on FCC 159).

**Item 8. Applicant Classification:** Place an [X] in the appropriate box preceding the type of entity to indicate the type of legal entity applying. If an [X] is placed in the "Other" box indicate the type of entity applying in the space provided (e.g., governmental entity, association, etc.). Limited liability companies should check the "Partnership" box.

**Item 9. Applicant Type:** Place an [X] in the appropriate box or boxes preceding the appropriate applicant type. This information will be used for purposes of determining the applicant's eligibility for any preferences available for designated entities. See Part 1 of the Commission's Rules for definitions of the different types of designated entities.

**Item 10. Preference Claimed:** Place an [X] in the "Yes" box if you are claiming a preference(s) available to designated entities. If you are not claiming a preference(s) available to designated entities, place an [X] in the "No" box. In order to be eligible for a preference(s) you must have checked one or more of the boxes in Item 9 other than the "None of the above" box, and a preference(s) must be available for the license(s) for which you are applying.

**Item 11. Markets/Frequency Blocks:** Enter the code for the market(s) on which you want to bid in the column under Market No. The codes will be provided by the Commission in a Public Notice. Use a separate line (a-e) for each different market. If you plan to bid on more than five markets place an [X] in the box below the table to indicate there are supplementary forms attached. You must use Supplemental Form, FCC 175-S. After each market list the code for the frequency block(s) or channel (s) on which you want to bid. These codes will be provided by the Commission in a Public Notice. For example, if you wanted to bid on two frequency blocks in market (a) and one block in market (b) you would enter the codes for those two blocks in columns 1 and 2 on line (a) and leave the remaining columns on that line blank. On line (b) you would enter in column 1 the code for the block you wanted in market (b) and leave the remaining columns on the line blank.

**Item 12. Authorized Representatives:** Type or print the name(s) of the person(s) you wish to designate as an authorized representative(s). Only authorized representatives will be allowed to make or withdraw bids at an auction. You may list a maximum of three (3) authorized representatives.

**Certification:** Read the certification. Enter the typed/printed name of the individual authorized to sign the application, his/her title, date signed, authorized individual's signature, the name of a person familiar with the application (contact person) and the phone number (including area code) of the contact person. See Part 1, Subpart Q of the Commission's Rules. All applications must bear an original signature of a person authorized to sign on behalf of the applicant. List in the space provided below or in an exhibit the name, citizenship and address of all partners, if the applicant is a partnership; of a responsible officer or director, if the applicant is a corporation; of the trustee, if the applicant is a trust or, if the applicant is none of the foregoing, list the name and address of a principal or other responsible person. See Part 1, Subpart Q of the Commission's Rules.

Also list in the space provided below or in an exhibit all parties with whom the applicant has entered into an agreement(s), of any kind, relating to the licenses being auctioned including such agreements(s) relating to the post auction market structure. See Part 1, Subpart Q of the Commission's Rules.

**NOTE:** The Commission's Public Notice announcing the auction for the licenses on which you are interested in bidding contains information essential to completing this form correctly. Forms which are completed incorrectly may be dismissed without an opportunity for resubmission.

Use this space for listing additional information required by the Certification. [If additional space is needed attach a separate sheet(s).]

The solicitation of personal information requested in this form is authorized by the Communications Act of 1934, as amended. The Commission will use the information to determine whether grant of this application is in the public interest. In reaching that determination, or for law enforcement purposes, it may become necessary to refer personal information contained in this form to another government agency. In addition, all information provided in this form will be available for public inspection. If information requested on this form is not provided, processing may be delayed or the application may be returned without action pursuant to the Commission's rules. Your response is required to obtain the requested authority.

Public reporting burden for this information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data needed, gathering and maintaining the data needed, and completing and reviewing the collection. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Federal Communications Commission, Records Management Division, Washington, D.C. 20554, and to the Office of Management and Budget, Paperwork Reduction Project (3060-0600), Washington, D.C. 20503.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1975, § 5 U.S.C. 552a(e)(3) AND THE PAPERWORK REDUCTION ACT OF 1980, 96-411, DECEMBER 11, 1980, 47 U.S.C. 3607

**Application to Participate in an FCC Auction  
Supplemental Form**

(This form is to be used in conjunction with FCC 175)

Applicant	Auction No.	FCC Account No.	Page ____ OF ____
Street Address/City (No P.O. Boxes)		State	ZIP Code

	Market No.	Frequency Block No.										
		1	2	3	4	5	6	7	8	9	10	11
(f)												
(g)												
(h)												
(i)												
(j)												
(k)												
(l)												
(m)												
(n)												
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(s)												
(t)												
(u)												
(v)												
(w)												
(x)												
(y)												

The solicitation of personal information requested in this form is authorized by the Communications Act of 1934, as amended. The Commission will use the information to determine whether grant of this application is in the public interest. In reaching that determination, or for law enforcement purposes, it may become necessary to refer personal information contained in this form to another government agency. In addition, all information provided in this form will be available for public inspection. If information requested on this form is not provided, processing may be delayed or the application may be returned without action pursuant to the Commission's rules. Your response is required to obtain the requested authority.

Public reporting burden for this information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Federal Communications Commission, Records Management Division, Washington, D.C. 20554, and to the Office of Management and Budget, Paperwork Reduction Project (3060-0600), Washington, D.C. 20503.

**Application for Mobile Radio Service Authorization  
or Rural Radiotelephone Service Authorization**

Approved by OAS  
3080-0823  
Expires 10/31/97  
Est. Avg. Burden  
Hours Per Response  
4 hours

**OVERVIEW**

**Purpose of Form**

Form FCC 600 is used to apply or to amend a pending application for an authorization to operate one or more radio stations in any of the land mobile radio services established by the FCC (except for the General Mobile Radio Service) and in the Rural Radiotelephone Service. The purpose of this form is to collect data and other information pertaining to the proposed radio stations. This data is used by the FCC to determine whether the public interest would be served by a grant of the requested authorization. Form FCC 600 replaces Form FCC 401 for all purposes and Form FCC 574 for most purposes.

**Introduction**

Form FCC 600 is a multi-part form comprising a main form and several optional schedules. Each application or amendment must contain one and only one main form (pages 1 and 2), but may contain as few or as many of the optional schedules as necessary. Some of the schedules are also used as attachments to Form FCC 489.

**The Main Form**

The purpose of the main form is to obtain information sufficient to identify the filer, establish the filer's basic eligibility and qualifications, to classify the filing, and to determine the nature of the proposed service. Space is also provided for filing fee information. The main form also contains the required certification and signature block. The main form is required for every application or amendment filed on Form FCC 600.

**The Schedules**

The purposes of the schedules are as follows:

**SCHEDULE A**

One Schedule A is required for each application or amendment in the radio services governed by Part 22 or Part 24 of FCC rules. These services are the Personal Communications Service, the Cellular Radiotelephone Service, the Paging and Radiotelephone Service, the Rural Radiotelephone Service, the Offshore Radiotelephone Service and the Air-ground Radiotelephone Service. Schedule A indicates the purpose of the filing. It is the only schedule needed for initial systems where no site specific data is being submitted, and for requests for extension of time to construct facilities. Schedule A must not be filed with Schedules D or E.

**SCHEDULE B**

Schedule B is used when site-specific data is required for applications, amendments or notifications involving individual channel assignments, in the radio services for which Schedule A is required. At least one Schedule B must be filed for each location for which data is required. Schedule B provides location data, information concerning proximity to market boundaries, technical information concerning the antennas and transmitters at the particular location, radial power and antenna height data, and information about points of communication for transmitters at the particular location. Each Schedule B can hold data for multiple antennas at one location by using additional copies of page 2. For each antenna, Schedule B can hold data for up to four transmitters and/or channels. Additional Schedule Bs may be filed for the same location or antenna if necessary.

**SCHEDULE C**

Schedule C is used when site-specific data is required for applications, amendments or notifications in the radio services for which Schedule A is required and for which spectrum is assigned in channel blocks. One Schedule C must be filed for each location for which data is required. Schedule C provides location data, technical parameters of the facility at the particular location, radial power and antenna height data.

**SCHEDULE D**

Schedule D is required for applications and amendments in all radio services for which Form FCC 600 may be used, except those for which Schedule A is required. It provides additional administrative data for stations in these services.

**SCHEDULE E**

Schedule E is required for applications and amendments in all radio services for which Form FCC 600 may be used, except those for which Schedule A is required. It provides station location data for stations in these services.

**SCHEDULE F**

Schedule F is required when permanent location data is submitted on Schedule B, C or E. However, in some services (e.g. PCS), applicants may need to obtain antenna clearance independent of the system authorization by filing Form FCC 854. See the pertinent part(s) of the FCC rules.

**SCHEDULE G**

Schedule G is required for applications and amendments in all radio services for which Form FCC 600 may be used, except those for which Schedule A is required. It provides technical data for stations in these services. The reverse side of Schedule G provides for additional frequencies. Additional Schedule Gs may be filed if necessary.

**SCHEDULE H**

Schedule H is required for applications and amendments in the Remote Pickup Broadcast Auxiliary Radio Service for permanent location stations and for land mobile stations operating on frequencies lower than 27.5 MHz. Failure to include this schedule when required will result in the return of the application without further action. Land mobile stations located near international borders that seek protection from interference should complete Schedule H.

**Schedules Required** (For filings other than Part 22 and Part 24)

If the application to be submitted includes fixed or permanent location stations (A - F), complete the Main Form, Schedule D, Schedule E, Schedule F and Schedule G. Schedule H must also be completed for fixed location stations proposed in the Remote Pickup Broadcast Auxiliary Radio Service. Schedule H must also be completed for all stations proposing to operate on frequencies below 27.5 MHz.

If the application to be submitted includes only control stations meeting the 20 foot criteria, mobile, temporary or itinerant locations (G - Z), complete Form 600 Main Form, Schedule D, Schedule E and Schedule G.



#### For Assistance

For assistance with Form FCC 600 applications for radio services regulated under Part 22 or Part 24, contact the mobile licensing division at the FCC, Washington, D.C. 20554, (202) 418-1350. For assistance with Form FCC 600 applications for other services, contact Consumer Assistance Branch, Federal Communications Commission, Gettysburg, PA 17325-7245, (800) 322-1117 or (717) 337-1212.

#### Applicable Rules and Regulations

Before the application is prepared, applicant should review the relevant part of the FCC rules in Title 47 of the Code of Federal Regulations. Copies of Title 47 may be purchased from the Superintendent of Documents, Government Printing Office, Washington, DC 20402. FCC rules generally require various exhibits to be filed with an application in addition to the information requested in the application form. Applicants should make every effort to file complete applications. Failure to do so can result in a dismissal or return of the application or a delay in processing the application.

#### Frequency Coordination

Applications for station authorizations which require frequency coordination in accordance with applicable FCC rules and any correspondence relating thereto, must initially be submitted to the certified frequency coordinator for the radio service or frequency group involved. For frequency coordination fee information, contact the appropriate frequency coordinator for your radio service.

After the completion of frequency coordination, these applications shall be forwarded by the coordinator to the correct address. All other applications shall be filed by the applicant at the correct address listed on the most current Public Notice. Applications should be filed at least sixty (60) days prior to the date upon which the radio facilities are required to be in operation.

#### Certified Coordinators (All services except Part 22 and Part 24)

See the most current Public Notice for correct addresses or contact Consumer Assistance Branch, Federal Communications Commission, Gettysburg, PA 17325-7245 (717) 337-1212 or (800) 322-1117

#### Quiet Zone

The quiet zone is a restricted area of operation within Virginia, West Virginia, and Garrett County, Maryland in the vicinity of the National Radio Astronomy Observatory, Green Bank, Pocahontas County, West Virginia. Permanent Stations in this area should be checked for compliance with applicable Commission rules. If the permanent station, including control stations meeting the 20 foot criteria, is bounded by 39° 15' N on the north, 78° 30' W on the east, 37° 30' N on the south, and 80° 30' W on the west, the application must be accompanied by a copy of the clearance obtained from the National Radio Astronomy Observatory. The request for clearance must be sent to: National Radio Astronomy Observatory, P.O. Box 2, Green Bank, West Virginia 24944.

## FILING INSTRUCTIONS

#### Paper Copies

The number of paper copies of this application required to be filed varies depending on the radio service. Refer to the pertinent part of the FCC rules for specific instructions.

#### Packages

The Main Form and the applicable schedules should be submitted as one package, stapled in the upper left corner. The Main Form should be first with the following schedules in alphabetical order.

#### Microfiche Copies (For Part 22 and Part 24 filings only)

Applications on Form FCC 600 for authority to operate facilities in the radio services governed by Part 22 or Part 24 of the FCC rules must be filed in microfiche form. See the pertinent part of the FCC rules to determine how this requirement applies. If microfiche is required, submit three microfiche (one original and two copies). Each microfiche must be a copy of the signed original. Each microfiche copy must be a 148mm X 105mm negative (clear transparent characters appearing on an opaque background) at 24X to 27X reduction for microfiche or microfiche jackets. One of the microfiche sets must be a silver halide camera master or a copy made on silver halide film such as Kodak Direct Duplicating Film. The microfiche must be placed in paper microfiche envelopes and submitted in a 5" x 7.5" envelope. Row "A" (the first row for page images) of the first microfiche must be left blank.

#### Processing Fee

A processing fee may be required with this form. To determine the required fee amount, refer to Subpart G of Part 1 of the FCC's rules (47 CFR Part 1, Subpart G) or the current fee filing guide for the radio service involved. For assistance with fees applicable in the radio services governed by Part 22 and Part 24 of the FCC rules, call (202) 418-0220. For assistance with fees in other radio services, contact the Consumer Assistance Branch, Federal Communications Commission, Gettysburg, PA 17325-7245, (800) 322-1117 or (717) 337-1212.

#### Incorporation by Reference (Part 22 and Part 24 filings only)

You may incorporate by reference documents, exhibits, or other lengthy showings already on file with the FCC only if: the information previously filed is more than one 8½" by 11" page in length, and all information therein is current and accurate in all significant respects; the reference states specifically where the previously filed information can be found (i.e., station call sign and application file number, title of proceeding, docket number and legal citations), including exhibit and page references. Use the relevant item number followed by "A". Items that call for numbers, or which can be answered "Y" or "N" by or other short answers must be answered directly without reference to a previous filing.

## GENERAL INSTRUCTIONS

#### Current Information

Information filed with the FCC must be kept current. The applicant should notify the FCC regarding any material change in the facts as they appear in the application. See 47 CFR 1.65.

#### Waiver Requests

Requests for waivers must contain as an exhibit a statement of reasons sufficient to justify a waiver. A separate request with the required showing must be made for each rule waiver desired, identifying the

specific rule or policy for which the waiver is requested. For waiver requests other than for rules in Part 22 and Part 24, there may be a fee requirement. Refer to the appropriate FCC fee filing guide.

#### Exhibits (For Part 22 and Part 24 filings only)

Each document required to be filed as an exhibit should be current as of the date of filing. Each page of each exhibit must be identified with the number or letter of the exhibit, the number of the page of the exhibit and the total number of pages of the exhibit. If material is to be

incorporated by reference, see the instruction on incorporation by reference. If interference studies are required by rule, attach these as an exhibit. If this application is a request for an extension of time to complete construction, then attach as an exhibit a statement explaining how failure to complete construction was beyond the applicant's control.

#### **English to Metric Conversions**

The following English to Metric equivalents should be used to convert heights and distances, where necessary:

1 foot = 0.3048 meters  
1 mile = 1.6093 kilometers

#### **Paperwork Reduction and Privacy Act Notice**

The solicitation of personal information requested in this form is authorized by the Communications Act of 1934, as amended. The FCC will use the information provided in this form to determine whether grant of this application is in the public interest. In reaching that determination, or for law enforcement purposes, it may become necessary to refer personal information contained in this form to another government agency.

In addition, all information provided in this form will be available for public inspection. If information requested on the form is not provided, processing of the application may be delayed or the application may be returned without action pursuant to FCC rules. Your response is required to obtain the requested authority.

Public reporting burden for this collection is estimated to be 0.25 to 7 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Federal Communications Commission, Records Management Branch, Washington, D.C. 20554.

The foregoing Notice is required by the Privacy Act of 1974, P.L. 93-597, December 31, 1974, 5 U.S.C. 552a(e)(3), and the Paperwork Reduction Act of 1980, P.L. 96-511, Section 3504(c)(3).

### **SPECIFIC INSTRUCTIONS FOR THE MAIN FORM**

#### **APPLICANT**

**Items 1-8** These items identify the applicant. If an authorization is granted, the information provided will become the licensee's name, address and telephone numbers of record, and the authorization will be sent to this address. Applicants must provide a current and valid mailing address in the United States, and this address must be that of the applicant, not the address of the radio equipment supplier, service shop or of any other third party. Failure to respond to FCC correspondence sent to the address of record may result in dismissal of an application, liability for forfeiture or revocation of an authorization.

**Items 9-16** These items identify the contact representative (usually the headquarters office of a large applicant, the law firm or other representative of the applicant, or the person or company that prepared or submitted the application on behalf of the applicant). In the event there is a question concerning the application, the FCC will attempt to communicate with the contact representative first.

#### **CLASSIFICATION OF FILING**

**Item 17** Indicates whether the filing is intended as an application or an amendment to a previously filed application. If "N" is indicated, the FCC will assign a new file number to the filing. If "A" is indicated, the FCC will attempt to associate the filing with a pending application described by Item 21.

**Item 18** Indicates whether the applicant believes that the FCC should classify the filing, for purposes of compliance with Section 309 of the Communications Act of 1934, as amended, as an application for a minor change to an existing station, if the filing is an application, or as a minor amendment, if the filing is an amendment. Refer, if necessary, to the FCC rule for the particular radio service involved (e.g. § 22.123 applies for the Part 22 radio services) for guidance as to which types of filings are classified as minor. For private radio services to which Section 309 does not apply, this item should be marked "D". For commercial mobile services, which are subject to Section 309, this item must be marked either "Y" or "N". If this item is marked "Y", the FCC will not list the filing in a Public Notice unless during processing the FCC subsequently determines that the filing should not be classified as minor. If this item is marked "N" and the filing appears to be acceptable for filing, the FCC will list the filing in a Public Notice as acceptable for filing prior to actually classifying it during processing.

**Item 19** This item indicates whether the filing proposes an initial facility, modification of an existing facility or renewal of an existing station, for the purposes of classification in regard to eligibility for inclusion in competitive bidding procedures. In the event that the filing is or becomes mutually exclusive with one or more other filings, the indication given here assists the FCC in determining what method will be used to select which filing(s) to grant. This item does not have to be completed for minor applications or amendments.

**Item 20** If the filing is related to an existing station, this item must be completed. The information requested in this item (call sign) identifies the existing station to which the filing is relevant.

**Item 21** If the filing is an amendment to a previously-filed application, this item must be completed. The information requested in this item identifies the previously-filed application.

#### **NATURE OF SERVICE**

**Item 22** This item indicates whether the applicant is applying for authorization to provide or use commercial mobile radio service, private mobile service, both commercial and private mobile service, or fixed service (such as Rural Radiotelephone Service, including BETERS, but not including fixed stations that are incidental to provision of mobile service). If the answer is "both", attach as an exhibit a description of the proposed service that explains why the applicant believes that a portion of the service to be provided should be classified as a private mobile service. Use 22A as the item number for the exhibit.

**Item 23-25** These items request information that the FCC could use to determine whether a proposed service is a commercial mobile radio service or a private radio service under Section 332 of the Communications Act of 1934, as amended. Item 23 must be answered "P" if the proposed service is to be made available to the public or to such classes of eligible users as to be effectively available to a substantial portion of the public, "E" if the service is to be made available to eligible users other than the applicant, but not constituting a substantial portion of the public, or "I" if the service will be available only to the applicant and its employees. Item 24 must be marked "P" if the service is to be provided for profit, i.e. with the intent of receiving compensation or monetary gain. Otherwise, Item 24 must be marked "N". Item 25 must be marked "Y" if the applicant proposes to provide interconnected service as defined in § 20.3 of the FCC rules. Otherwise, Item 25 must be marked "N".

**Item 26** This item requests a two-letter code designating the FCC radio service, or radio service sub-category, in which the applicant requests authorization and to which any requested channels are allocated. The codes are as follows:

Personal Communications Service (Part 24)	
Broadband	CW
Narrowband	CN
Public Mobile Services (Part 22)	
Cellular Radiotelephone Service	CL
Paging and Radiotelephone Service	CD
Air-ground Radiotelephone Service	CG
Offshore Radiotelephone Service	CO
Rural Radiotelephone Service	CR
Specialized Mobile Radio (Part 90)	
806-821/851-886 MHz, conventional	GX
806-821/851-886 MHz, trunked	YX
896-901/935-940 MHz, conventional	GR
896-901/935-940 MHz, trunked	YS
220 MHz Systems (Part 90)	
Nationwide Non-Commercial 10 Channel	NL
Nationwide Non-Commercial 5 Channel	NS
Nationwide Commercial 5 Channel	NC
Non-Nationwide 5 Channel Trunked	QT
Non-Nationwide Data	QD
Non-Nationwide Public Safety / Mutual Aid	QM
Non-Nationwide Other	QO
Industrial (Part 90)	
Business Radio Service	
806-821/851-886 MHz, conventional	GB
806-821/851-886 MHz, trunked	YB
896-901/935-940 MHz, conventional	GU
896-901/935-940 MHz, trunked	YU
929-930 MHz paging systems	GS
other	IB
Industrial services, except Business Radio Service	
806-821/851-886 MHz, conventional	GO
806-821/851-886 MHz, trunked	YO
896-901/935-940 MHz, conventional	GI
896-901/935-940 MHz, trunked	YI
other	
Forest Products Radio Service	IF
Petroleum Radio Service	IP
Special Industrial Radio Service	IS
Telephone Maintenance Radio Service	IT
Film and Video Production Radio Service	IV
Power Radio Service	IW
Manufacturers Radio Service	IX
Relay Press Radio Service	IY
Land Transportation (Part 90)	
Land Transportation services	
806-821/851-886 MHz, conventional	GO
806-821/851-886 MHz, trunked	YO
896-901/935-940 MHz, conventional	GI
896-901/935-940 MHz, trunked	YI
other	
Automobile Emergency Radio Service	LA
Railroad Radio Service	LR
Taxicab Radio Service	LX
Interurban Passenger Radio Service	LI
Interurban Property Radio Service	LJ
Urban Passenger Radio Service	LU
Urban Property Radio Service	LV
Public Safety (Part 90)	
National Plan	
821-824/886-888 MHz, conventional	GF
821-824/886-888 MHz, trunked	YF
Public Safety services	
806-821/851-886 MHz, conventional	GP
806-821/851-886 MHz, trunked	YP
896-901/935-940 MHz, conventional	GA
896-901/935-940 MHz, trunked	YA
other	
Fire Radio Service	PF

Highway Maintenance Radio Service	PL
Local Government Radio Service	PL
Emergency Medical Radio Service	PM
Police Radio Service	PD
Forestry Conservation Radio Service	PC

Special Emergency (Part 90)	
Special Emergency Radio Service	PS

Mass Media (Part 74)	
Low Power Auxiliary Broadcast	LP
Remote Pickup Auxiliary Broadcast	RP
Other	
Radiolocation Radio Service (Part 90)	RS

**Item 27** This item requests a two-letter code indicating the type of operation proposed. This item must be completed for radio services governed by Part 22. It may be omitted for applications in all other services. The codes are as follows:

One-way paging	OP
Response paging	RP
Two-way mobile telephone	T
Two-way mobile data	TD
Two-way mobile telephone, data & images	TB
Two-way mobile communications	TC
Dispatch	DP
Rural radiotelephone, conventional	RR
Rural radiotelephone, BSTRS	RB
Air-ground radiotelephone	AR
Point-to-point	PP
Point-to-multipoint	PM
Other	NS

#### ENVIRONMENTAL POLICY

**Item 28** This item is required for compliance with the National Environmental Policy Act of 1969, as amended, 42 U.S.C. 4321-4335. See also Part 1, Subpart I of the FCC rules (47 CFR 1.1301-1.1319). This item must be answered, either "Y" or "N". Answer "Y" if a FCC grant of the proposed facility may have a significant environmental effect as defined in § 1.1307 of the FCC rules and attach an exhibit with the required environmental assessment. Use 28A as the item number for this attachment. Examples of facilities that may have a significant effect on the environment include:

- an antenna structure located in a residential area (as defined by applicable zoning laws) which will utilize high intensity aviation obstruction lighting
- a facility located in an officially designated wilderness area, wildlife preserve or floodplain
- a facility that affects a site significant in American history
- a facility, the construction of which involves extensive changes in surface features

#### ALIEN OWNERSHIP

**Items 29-33** These items request indications and information that enable the FCC to determine whether or not an applicant is eligible under Section 310 of the Communications Act of 1934, as amended, to hold a station license. Item 29 must be answered, either "Y" or "N". Items 30-33 must be answered on applications for authority to provide commercial mobile service, but may be omitted on other applications. The FCC can not grant an authorization to a foreign government or the representative of a foreign government. Therefore, if the true and correct answer to Item 29 is "Y", the applicant is not eligible for a license and the FCC will dismiss the application, if filed, without further consideration. Likewise, the FCC can not grant an authorization to provide commercial mobile radio service to any applicant for which the true and correct answer to Item 30, 31 or 32 is "Y". If the answer to Item 33 is "Y" and the application is for authorization to provide

commercial mobile radio service, attach an exhibit explaining the nature and extent of any foreign ownership or control. Use 33A as the item number for this exhibit.

#### **BASIC QUALIFICATIONS**

**Items 34-38** These items request indications and information that enable the FCC to determine whether an applicant is disqualified from holding an FCC authorization because of misconduct. Items 34-36 must be answered "N" if there is no misconduct. Item 37 must be answered "N" if the applicant is not a party in any pending matter relevant to misconduct. Item 38 must be answered "Y" if the applicant is not subject to denial of federal benefits pursuant to the Anti-Drug Abuse Act of 1988 (21 U.S.C. § 862).

If the answer to items 34, 35, 36 or 37 is "Y" or if the answer to item 38 is "N", attach as an exhibit a statement explaining the circumstances and why the applicant believes that an FCC grant of the application would be in the public interest notwithstanding the actual or alleged misconduct. Use 34A, 35A, 36A, 37A or 38A as the item number(s) for such exhibits, respectively.

#### **CERTIFICATION**

**Items 39-43** These items must be completed. To be acceptable for filing, applications and amendments must be signed in accordance with Part 1 of the FCC rules. The signer must be a person authorized to sign the application. Paper originals of applications must bear an original signature. Neither rubber-stamped nor photocopied signatures are acceptable.

### **SPECIFIC INSTRUCTIONS FOR SCHEDULE A**

#### **Administrative Information**

#### **PURPOSE OF FILING**

**Item A1** This item states the purpose(s) for the filing. Enter one or more letters corresponding to the listed purposes. If a control point modification is the only purpose of the filing, answer item A1 "S" and file Schedule A as an attachment to Form FCC 489, rather than Form FCC 600. If none of the listed purposes correctly describe the reason for the filing, or if the filing requests a waiver of one or more FCC rules or an extension of time to construct facilities, attach as an exhibit a narrative description of the purpose, circumstances and/or waiver request including required justification. Use A1A as the item number for this exhibit.

#### **MARKET / CHANNEL BLOCK**

**Item A2** This item must be answered only if the filing is for an authorization in one of the radio services that is licensed on a geographic licensing area or "market" basis (e.g. Cellular Radio Service). It identifies the market to which the filing pertains. The market designators are listed in FCC Public Notices or in the FCC Record. This item should not be answered for filings in radio services licensed on a station-by-station basis.

**Item A3** This item must be answered only if the filing is for an authorization in one of the radio services for which spectrum is assigned in channel blocks. For filings in the Cellular Radio Service, the answer to this item is either "A" or "B". For filings in the Air-ground Radiotelephone Service (commercial aviation), the answer to this item is "C-" followed by a number between 1 and 29 (e.g. C-17). This item should not be answered for filings in radio services in which channels are individually assigned.

**Item A4** This item must be answered only if the filing is for an authorization in one of the radio services that is licensed on a geographic licensing area or "market" basis and the market has been subdivided.

**Item A5** This item must be answered only if the filing is for an authorization in one of the radio services that is licensed on a geographic licensing area or "market" basis (e.g. Cellular Radio Service). In addition to item A2, it identifies the market to which the filing pertains. The market names are listed in FCC Public Notices or in the FCC Record. This item should not be answered for filings in radio services licensed on a station by station basis.

#### **CONTROL POINTS**

**Items A6-A9** These items provide the location(s) of the station or system control points, and the telephone number(s) where a person responsible for operation of the station or system could be reached, if necessary. These items must be answered only for new systems or stations and when a control point is to be added, deleted or modified. These items do not have to be answered for broadcast subcarrier paging (i.e. if the answer to item A1 is "O"). If a control point modification is the only purpose of the filing, answer item A1 "S" and file Schedule A as an attachment to Form FCC 489, rather than Form FCC 600. To move an existing control point or change a telephone number, delete the old information and add the new.

#### **FACILITIES NOT CONSTRUCTED**

**Items A10-A12** These items must be completed only in connection with (1) filings that request an extension of time to construct specific facilities in services where locations are individually subject to a construction period requirement, and the rest of the station or system has been completed; (2) notifications, using Schedule A as an attachment, reporting that a system has been partially constructed. In some cases where more than one antenna or transmitter is authorized at a location, and some but not all of the facilities have been constructed, it may be necessary to further distinguish the unconstructed facilities by channel. If so, indicate the affected channels in an exhibit, using item number A10A.

### **SPECIFIC INSTRUCTIONS FOR SCHEDULE B**

#### **Technical Data - Individual Channel Assignment**

#### **LOCATION**

**Item B1** This item indicates what action the filer wants the FCC to take in the database with regard to the location specified in items B2-B10. If the filing is for a new station or system or for a new location in an existing system or station (i.e. the location does not already exist on any channel in the authorized system or station or in a pending application for the same system or station), the answer to this item is "A". If the location is an existing location in the authorized system or station or a location proposed in a pending application for the same system or station, and the licensee has abandoned or intends to abandon the location completely, the answer to this item is "D". (Also

see the instruction for items B11-B14 below.) In all other cases, the answer to this item is "M". If the filer answers this item "A" and the FCC computer finds an exact match for the location within the system or station, the Schedule B will be processed as if this item had been answered "M". If the filer answers this item "M" and the FCC computer cannot find an exact match for the specified location within the system or station, the Schedule B will be processed as if this item had been answered "A". If the filer answers this item "D" and the FCC computer cannot find an exact match for the specified location within the system or station, the Schedule B will not be processed.

**Item B2** This item is the FCC assigned location number for an existing location, or for a new location, a letter (e.g. A, B, C etc.). In either case, this item is used as the key to identify the location on Schedule F (if Schedule F is filed).

**Items B3-B6** These items identify the location by its address or, if there is no address, by a brief description of the location such as a distance and direction from known landmarks (e.g. "5 km south of Anytown, US").

**Items B7, B8, B9 and B10** These items are the geographic coordinates of the location. Items B7 and B8 are the North latitude and West longitude, respectively, with reference to the North American Datum of 1927. Items B7 and B8 are required. Items B9 and B10 are the North latitude and West longitude, respectively, with reference to the North American Datum of 1983. Items B9 and B10 are optional, but may assist processing of the Schedule B.

**Items B11-B14** These items key to location data in the data base that is to be replaced by the data in items B3-B10. The filer should complete these items only if (1) correcting geographical coordinates or (2) relocating *all* facilities at the location indicated by these items to the location specified in items B3-B10. The filer must *not* complete these items if the intent is to relocate some, *but not all*, of the facilities at a particular location. (In such a case, the filer must submit two Schedule Bs with the filing - one to delete the facilities at the previous location and another to add those facilities at the new location.)

#### SUPPLEMENTARY LOCATION INFORMATION

**Item B15** This item is optional and concerns proximity of the location to Canada. If the filer does not know whether the location is North of Line A or East of Line C, this item should be left blank. If the filer answers "A" or "C" (and this appears to be plausibly correct), the FCC will initiate applicable coordination procedures with the Government of Canada. In the event the filer needs to submit additional information regarding coordination of a channel assignment with the Government of Canada, this should be attached as an exhibit, using item number B15A.

**Item B16** This item is optional and concerns proximity of the location to Mexico. If the filer does not know whether the location within 200 kilometers (124 miles) of the U.S.-Mexico border, this item should be left blank. If the filer answers "Y" (and this appears to be plausibly correct), the FCC will initiate applicable coordination procedures with the Government of Mexico. In the event the filer needs to submit additional information regarding coordination of a channel assignment with the Government of Mexico, this should be attached as an exhibit, using item number B16A.

**Items B17-B19** These items must be completed only for filings in the narrowband Personal Communications Service (other than nationwide and response channel related filings).

#### ANTENNA

**Item B20** This item indicates what action the filer wants the FCC to take in the database with regard to the antenna specified in items B22-B28. If the filing is for a new antenna (i.e. the antenna does not already exist at this location for any channel in the authorized system or station or in a pending application for the same system or station), the answer to this item is "A". If the antenna is an existing antenna in the authorized system or station or an antenna proposed in a pending application for the same system or station, and the licensee has *abandoned or intends to abandon the antenna completely*, the answer to this item is "D". In all other cases, the answer to this item is "M". If the filer answers this item "A" and the FCC computer finds an exact match for the antenna within the system or station, this portion of the Schedule B will be processed as if this item had been answered "M". If the filer answers this item "M" and the FCC computer cannot find an exact match for the specified antenna within the system or station, this

portion of the Schedule B will be processed as if this item had been answered "A". If the filer answers this item "D" and the FCC computer cannot find an exact match for the specified antenna within the system or station, this portion of the Schedule B will not be processed.

**Item B21** This item indicates whether the antenna in question is already authorized or whether it is only proposed in a pending application. The filer must answer this item.

**Item B22** This item indicates the FCC antenna number of the antenna. If a number has been printed on an authorization the applicant knows it, he or she should complete this item.

**Items B23-B28** This item describes the antenna by its type, manufacturer and model number, and must be completed for all filings except for those in the Air-ground Radiotelephone Service. Type means a generic description (e.g. collinear vertical, Yagi, panel array). Manufacturer is the name of the company that made the antenna, and model number is the designation that the manufacturer assigns to the antenna. If a polar plot of the antenna horizontal or vertical radiation pattern is required by the pertinent FCC rules, attach as an exhibit such plot (or a table of the polar data for 360° in 5° increments in the format: bearing, gain), using item number B25A.

**Items B29 & B30** These items report the actual and effective height at which the antenna is mounted. These items must be completed for all filings except for those in the Air-ground Radiotelephone Service.

**Item B31** This item provides the beamwidth of the main major lobe of a directional antenna used with a fixed station. This item need not be completed for any stations other than fixed stations.

#### TRANSMITTERS FOR ANTENNA

**Item B32** This item is the FCC transmitter number for the transmitter.

**Item B30** This item indicates what action the filer wants the FCC to take in the database with regard to as many as four transmitters (or channels) associated with the (same) antenna. If the filing is for a new transmitter or channel (i.e. a transmitter or channel that does not already exist for this antenna at this location in the system or station or in a pending application for the same system or station), the answer to this item is "A". If the transmitter or channel already exists for this antenna at this location in the authorized system or station or for an antenna at this location proposed in a pending application for the same system or station, and the licensee has *abandoned or intends to abandon the transmitter or channel completely*, the answer to this item is "D". In all other cases, the answer to this item is "M". If the filer answers this item "A" and the FCC computer finds an exact match for the transmitter or channel for this antenna at this location within the system or station, this portion of the Schedule B will be processed as if this item had been answered "M". If the filer answers this item "M" and the FCC computer cannot find an exact match for the specified transmitter or channel for this antenna at this location within the system or station, this portion of the Schedule B will not be processed.

**Item B31** This item specifies the center frequencies of the channels on which the transmitters operate or are proposed to operate. The pertinent channel(s) must be specified for each transmitter.

**Item B32** This item requests a four letter code that identifies the transmitter class. The four letter code consists of two letters that conform to the international station classification nomenclature used by the International Frequency Registration Board, followed by two letters that further classify the transmitter by usage. The codes are as follows:



Base	FBBS
Standby	FBST
Mobile subscriber	MLSB
Dispatch	FXDI
Auxiliary test	FXTS
Control	FXCT
Repeater	FXRP
Fixed relay	FXRX
Ground	FBGS
Air-ground signaling	FBSI
Inter-office	FXIO
Fixed subscriber	FXSB
Central office	FXCO

**Item B33** This item should be completed only if the filing requests authority to use an emission type that is not already authorized in the FCC rules for use by all stations in the pertinent radio service.

**Item B34** This item reports the maximum effective radiated power (ERP) in any direction on the specified channel. This item must be completed for all transmitter filings. The answer must be stated in Watts.

## SPECIFIC INSTRUCTIONS FOR SCHEDULE C

### Technical Data - Block Channel Assignment

#### LOCATION

**Item C1** This item indicates what action the filer wants the FCC to take in the database with regard to the location specified in items C3-C10. If the filing is for a new station or system or for a new location in an existing system or station (i.e. the location does not already exist in the authorized system or station or in a pending application for the same system or station), the answer to this item is "A". If the location is an existing location in the authorized system or station or a location proposed in a pending application for the same system or station, and the licensee has abandoned or intends to abandon the location completely, the answer to this item is "D". (Also see the instruction for items C11-C14 below.) In all other cases, the answer to this item is "M". If the filer answers this item "A" and the FCC computer finds an exact match for the location within the system or station, the Schedule C will be processed as if this item had been answered "M". If the filer answers this item "M" and the FCC computer cannot find an exact match for the specified location within the system or station, the Schedule C will be processed as if this item had been answered "A". If the filer answers this item "D" and the FCC computer cannot find an exact match for the specified location within the system or station, the Schedule C will not be processed.

**Item C2** This item is the FCC assigned location number for an existing location, or for a new location, a letter (e.g. A, B, C etc). In either case, this item is used as the key to identify the location on Schedule F (if Schedule F is filed).

**Items C3-C6** These items identify the location by its address or, if there is no address, by a brief description of the location such as a distance and direction from known landmarks (e.g. "5 km south of Anytown, US").

**Items C7, C8, C9 and C10** These items are the geographic coordinates of the location. Items C7 and C8 are the North latitude and West longitude, respectively, with reference to the North American Datum of 1927. Items C7 and C8 are required. Items C9 and C10 are the North latitude and West longitude, respectively, with reference to the North American Datum of 1983. Items C11 and C12 are optional, but may assist processing of the Schedule C.

#### RADIAL DATA FOR ANTENNA

**Item B35** This item reports the height of the antenna center of radiation above the average terrain elevation (AAT) along each of the eight cardinal radials. This item must be completed for all antenna filings except for those in the Air-ground Radiotelephone Service.

**Items B36-B39** These items report the effective radiated power (ERP) for each transmitter or channel in each of the eight cardinal radial directions. These items must be completed for all transmitter filings except for those in the Air-ground Radiotelephone Service.

#### POINTS OF COMMUNICATION FOR ANTENNA

**Items B40-B45** These items describe fixed points of communication for (1) stations in the Rural Radiotelephone Service serving individually licensed subscribers, and (2) point-to-multipoint transmitters operating on channels that are assigned only to stations that communicate with four or more points. These items should not be completed by filers for any other purpose.

**Items C11-C14** These items key to location data that is to be replaced by the data in items C3-C10 in the data base. The filer should complete these items only if (1) correcting geographical coordinates or (2) relocating *all* facilities at the location indicated by these items to the location specified in items C3-C10. The filer must *not* complete these items if the intent is to relocate some, *but not all*, of the facilities at a particular location. (In such a case, the filer must submit two Schedule Cs with the filing - one to delete the facilities at the previous location and another to add those facilities at the new location.)

#### TECHNICAL PARAMETERS

**Item C15, C16** These items report the actual and effective height at which the antenna is mounted. These items must be completed for all filings except for those in the Air-ground Radiotelephone Service.

**Item C17** This item reports the maximum effective radiated power (ERP) of the facility in any direction. This item must be completed for all transmitter filings. The answer must be stated in Watts.

#### RADIAL DATA

**Item C18** This item reports the height of the antenna center of radiation above the average terrain elevation (AAT) along each of the eight cardinal radials. This item must be completed for all Schedule C filings except for those in the Air-ground Radiotelephone Service.

**Item C19** This item reports the effective radiated power (ERP) in each of the eight cardinal radial directions. This item must be completed for all Schedule C filings except for those in the Air-ground Radiotelephone Service.

**Item C20** This item reports the calculated radial distance to the service area boundary (SAB) from the specified location. This item is required only for filings in the Cellular Radiotelephone Service.

**Item C21** This item reports the determined radial distance to the Cellular Geographic Service Area (CGSA) from the specified location. This item is required only for filings in the Cellular Radiotelephone Service.

## GENERAL INSTRUCTIONS FOR SCHEDULES D, E, F, G AND H

Location ("LOC") letters A through F carry through on Schedule E Items E2 - E8, Schedule F Items F1 - F13, Schedule G Items G1 - G8, and Schedule H Items H1 - H5. It is requested that the applicant begin by inserting the parameters of the principal base or mobile relay station on LOC line "A" (plus any other different class of station at that location), followed by control station, fixed relay stations, etc. When more than one class of station is proposed to be at a common location, use the same permanent location letter A through F and a separate horizontal line entry for each class of station, and furnish the information required by the schedules for each separate class of station. For example, if it is proposed to install a base station, a mobile relay station, and a fixed relay station at common location "A", the appropriate information must be entered on three (3) separate horizontal lines. The next separate permanent location would use letter "B", etc.

In the 470 - 512 MHz band, applicants for mobile units, itinerant stations and stations at temporary locations (under Part 90) must furnish the information requested in Schedule E Items E9 - E12 and Schedule G Items G1 - G6. In the 220 - 222 MHz and above 512 MHz, applicants for control stations with antenna heights meeting the 20 foot criteria and/or for mobile units, itinerant stations and stations for temporary locations must furnish the information requested in Schedule E Items E9 - E12 and Schedule G Items G1 - G6.

Below 470 MHz except 220 - 222 MHz, applicants for control stations with antenna heights meeting the 20 foot criteria, itinerant stations, stations at temporary locations, and mobile units must furnish the information requested in Schedule E Items E9 - E12 and Schedule G Items G1 - G5. Since LOC letters A through F are reserved for permanent location stations, entries for control stations meeting the 20 foot criteria (excluding 470 - 512 MHz) may be inserted on one line.

NOTE: Applicants for all control stations in the 470 - 512 MHz band (under Part 90) must use LOC letters A - F and furnish the information required by the schedules.

If your application is approved, a license will be mailed to you. This authorization permits you to commence operations. (Note: It is a violation of Federal Law to begin transmitting prior to obtaining an authorization.) If an application is incomplete or filled out incorrectly, it will be returned or dismissed along with the reasons for this action. Applications which are not in good order will take additional time to process. You are, therefore, urged to be very careful when completing the application. Each entry on the Form 600 must be complete in itself. Do NOT use entries such as "On File", "No Changes", "Does Not Apply", "Same as...", etc.

Applications for modification of existing station authorizations MUST include all current station information in addition to all items being modified. (See Schedule D Item D3).

## SPECIFIC INSTRUCTIONS FOR SCHEDULE D

### Administrative Data

Enter the Licensee Name, Radio Service and Call Sign or Station Location city and state.

#### PURPOSE OF FILING

Item D1 Enter the purpose of this filing in the brackets.

N = New Station - Place an N in the brackets to indicate that this is an application for a radio station not presently licensed in the service listed in Item 26 on page 1 of the Form 600 Main Form.

M = Modification - Place an M in the brackets to indicate a desired change in the conditions of a license(s) during the current authorized period. See applicable Commission rules. Use Item D3 to describe the change(s) desired. Complete the form in full as for a new station. (Note: Once a license(s) is modified, all previous copies of the license(s) are no longer valid regardless of the expiration date shown.)

R = Renewal - Place an R in the brackets to indicate that you wish to renew an existing authorization that has not expired.

X = Reinstatement of Expired Authorization - Place an X in the brackets to indicate reinstatement of an expired authorization. Complete the form in full as for a new station. Licensees that have been expired more than 30 days cannot be reinstated. In these cases, the former licensee should submit a completed application including required frequency coordination for a new license.

A = Assignment of Authorization - Place an A in the brackets to indicate the request for an assignment of the right, title, and interest to a station presently authorized to another person or entity. Prepare the application in your own name and complete it in the same manner as for a new station with all questions answered and include a detailed statement of your eligibility for Item D12. Include a letter from the assignor meeting the requirements of the Commission's rules. For your

convenience, FCC Form 1046, "Assignment of Authorization" may be obtained from any Commission office for this purpose.

NOTE: If the purpose of filing is Renewal, Reinstatement of Expired Authorization or Assignment of Authorization and a modification to the license is also required, use Item D3 to describe the changes.

Item D2 If your application is for a new station, leave Item D2 blank. If you are changing to system licensing, list the existing call signs assigned to the system and indicate which of your existing fixed call signs you would prefer to retain by listing that call sign first.

Item D3 If the application is intended to modify a current license(s), indicate the modification(s) proposed. Applications for modification of existing station authorizations must include all current station information in addition to all items being modified. (Note: Certain modifications may require new frequency coordination or notification to the FAA - See Part 17 of the FCC Rules and Part 77 of the FAA Rules).

#### ASSOCIATED CALL SIGNS

Item D4 List any call sign(s) which is part of the system and licensed separately.

#### POINT OF CONTACT

Items D5-D6 Enter the street address, city, state and voice telephone number (including the area code) of the contact point.

#### ASSOCIATED BROADCAST STATION

Items D7-D9 Complete these items for the Broadcast Auxiliary Radio Services only. Enter the parent station call sign, parent station city and parent station state.

## MARKET AREA

**Item D10** This item must be answered only if the filing is for an authorization in one of the radio services that is licensed on a geographic licensing area or "market" basis. It identifies the market to which the filing pertains. The market designators are listed in FCC Public Notices or in the FCC Record. This item should not be answered for filings in radio services licensed on a station by station basis.

## PAGING OPERATIONS

**Item D11** List the number of paging receivers in this system.

## ELIGIBILITY

**Item D12** Provide a statement that clearly indicates your qualifications for the chosen service. This statement should include:

- (1) A general description of your business or activity
- (2) A description of how radio will be employed in the activity
- (3) Any other information which you believe will aid in a determination of your eligibility for the service requested.

Note: Failure to provide clear and complete details justifying eligibility will result in return or dismissal of your application. Do not use terms such as "No Change" or "On File".

**Item D13** Enter the number and paragraph of the FCC Rule Section which describes the eligibility for the particular radio service you specified in Item 26 on page 1 of FCC Form 600 Main Form.

## FREQUENCY COORDINATION NUMBER

**Item D14** This item will be completed by the appropriate certified frequency coordinators for those applicants who are required to comply with the frequency coordination requirements.

## SPECIFIC INSTRUCTIONS FOR SCHEDULE E

### Station Location Data

The Form 600 Schedule E has been designed to accommodate six (6) permanent locations. LOC letters A through F are to designate the separate locations. No more than six (6) different permanent locations may be licensed under one call sign. LOC letters A through F for items E2-E8 correspond to LOC letters A through F on Schedules F, G and H. Enter the Licensee Name, Radio Service and Call Sign or Station Location city and state.

**Item E1** The latitude and longitude for locations in the United States and the Caribbean Islands must be referenced to either the North American Datum of 1927 (NAD 27) or 1983 (NAD 83). Enter "2" for NAD 27 or "8" for NAD 83. For locations in other areas, enter "O" for Other and specify the datum used. Topographical maps will indicate which datum is used. All coordinates shown on this filing must be calculated using the same datum.

### FIXED OR PERMANENT LOCATIONS

**Item E2** Enter the street address or specific geographic description for the transmitter antenna location for each station listed for LOC letters (A) through (F). (P.O. Box or geographic coordinates are not acceptable.)

**Item E3** Enter the name of the city or town in which the transmitter antenna is located for LOC letters (A) through (F). For rural or unincorporated areas, enter the nearest city or town to the transmitter antenna location.

**Item E4** Enter the name of the county in which the transmitter antenna is located for each station listed for LOC letters (A) through (F).

**Item E5** Enter the two letter abbreviation for the state in which the transmitter antenna is located for LOC letters (A) through (F). The abbreviations for each state are provided in Table 1 on the reverse of Form 600 Schedule E.

**Item E6** Enter the geographic coordinates of latitude in degrees, minutes, and seconds to the nearest second for LOC letters (A) through (F). "N" for north will be assumed. Enter "S" for south.

**Item E7** Enter the geographic coordinates of longitude in degrees, minutes, and seconds to the nearest second for LOC letters (A) through (F). "W" for west will be assumed. Enter "E" for east.

**Item E8** Enter to the nearest meter the elevation above mean sea level of the ground at the antenna location for LOC letters (A) through (F). This information can be determined using a 7.5 minute topographical

quadrangle map of the area or you may consult the city or county surveyor in your area. Topographical maps may be purchased from the U.S. Geological Survey, Washington, D.C. 20242 or from its office in Denver, Colorado 80225. See antenna figure examples on Schedule F (c = ground elevation above mean sea level).

### CONTROLS MEETING THE 20 FOOT CRITERIA, MOBILE OR TEMPORARY LOCATIONS

**Item E9 - E12** These items are for mobile units, stations operating at temporary locations, itinerant stations and control stations meeting the 20 foot criteria. Location letters G through Z should correspond with location letters G - Z on Schedule G. For example, H 30 kilometer radius of Station A, I 30 kilometer radius of Station B.

For control stations meeting the 20 foot criteria, enter the location letter associated with the control station(s) frequency(s) on Schedule G and the primary control state in item E11.

For mobile, temporary and itinerant operations, enter the location letter associated with the mobile, temporary or itinerant frequency(s) on Schedule G.

### AREA OF OPERATION CODES TO BE USED IN COMPLETING ITEM E10:

- A - F = Centered around permanent station A - F
- P = Centered around the operating area other than A - F
- S = Statewide operations within a single state
- N = The 48 contiguous states
- O = Includes Hawaii, Alaska, territories or possessions

If the area of operation is centered around permanent stations (A - F), enter the location letter, complete Item E9 with the radius in kilometers of the normal area of operation and E10 with the appropriate permanent station location letter A - F. For example, H 45 kilometer radius of station A.

In the event a specific mile radius of station A is an inadequate description for your system, the application is for mobile only, stations operating at temporary locations or for itinerant stations, enter the location letter, in item E9 enter a radius in kilometers, in item E10 enter "P", in item E11 enter the geographical coordinates (latitude and longitude in degrees, minutes and seconds), the county and state of the center of the operating area. For example, H 50 kilometer radius of 42-29-47 87-41-16, Cook county, IL.

For statewide operations within a single state, enter the location letter. In item E10 enter "S" and in item E11 enter the abbreviation for the state (See Table 1 on the reverse of Form 600 Schedule E). If the state you are operating in is Alaska, enter "W" in item E12 if your operations are west of Line C. If your operations are east of Line C, enter "E" in item E12 (Line C = 144 degrees Longitude).

If your area covers the 48 contiguous states, enter the location letter. In item E10 enter "N" and in item E11 enter "US" for the state. Complete item E12 with "S" if your operations will be South of Line A.

If operations will be North of Line A, complete item E12 with "N". See Appendix I to these instructions for a list of counties by state, having areas north of Line A.

If your area includes, in addition to the 48 contiguous states, Hawaii, Alaska, territories or possessions, enter a separate line for each additional state, territory or possession by including its respective two letter state code. Enter the location letter, in item E10 enter "O", and in item E11 enter the singular two letter state code. If operating in Alaska west of Line C, enter "W" in item E12. If operating in Alaska east of Line C, enter "E" in item E12 (Line C = 144 degrees Longitude).

## SPECIFIC INSTRUCTIONS FOR SCHEDULE F

### Antenna Structure Data

Schedule F must be completed and filed when permanent location data is submitted on Schedules B, C or E, except if Form 854 is required. Enter the Licensee Name, Radio Service and Call Sign or Station Location city and state.

If you completed Schedule E, LOC letters A-F for items F1 - F13 correspond to LOC letters A through F on Schedule E.

**Item F1** If you completed Schedule B or C, Location Number is used as the key to associate with item B10 on Schedule B and item C10 on Schedule C. Enter a Location Number.

**Item F2** If your antenna will be mounted on a structure with an existing antenna, enter "E". If you propose to construct a new structure or use one which contains no existing licensees, enter "N". The term "existing antenna" applies to any structure with an antenna which is presently utilized by existing licensees.

**Item F3** If item F2 is "E", enter the call sign of one existing licensee using the structure.

**Item F4** If item F3 is completed, enter the radio service for that call sign.

**Item F5** Enter the full legal name of the owner of the antenna structure. If the owner is:

1. an individual doing business in his/her own name, enter last name, first name, middle initial.
2. an individual doing business under a firm or company name (sole proprietorship), enter both the individual's name and the firm or company name. "Doing business as" may be abbreviated as "dba"
3. a partnership doing business under a firm or company name, enter the full name of the partnership.
4. an unincorporated association, enter the name of the association.
5. a corporation or governmental entity, enter the full legal name of the entity.

Enter the area code and telephone number.

**Item F6** See antenna figure examples 1 - 3 on the reverse of Form 600 Schedule F. Indicate the number of the figure which most resembles your antenna structure.

**Item F7** Enter the type of supporting structure on which the antenna is or will be mounted (i.e. building, tower, tank, silo, building/tower, etc)

**Item F8** Enter the height above ground in meters, to the highest point of the supporting structure only. For instance, if the antenna structure consists of a building/tower combination, include any elevator shaft, flag pole, or penthouse in the support structure height, but not the antenna, tower, pole or mast. If the antenna structure is a tower only, include the height of the tower but not the antenna. Refer to letter "b" in the antenna figure examples on the reverse of Form 600 Schedule F.

**Item F9** Enter the overall height above ground in meters, of the entire antenna structure to the highest point, including any appurtenances. You must include antennas, dishes, obstruction lighting. Refer to letter "d" in the antenna figure examples on the reverse of Form 600 Schedule F.

**Item F10** Enter the FCC assigned tower number if the tower is existing and the number is known.

**Item F11** If a Notice of Construction or Alteration has been filed with the FAA, enter "Y". If a Notice of Construction or Alteration has not been filed, enter "N". You must notify the Federal Aviation Administration on FAA Form 7480-1 (obtainable from any FAA office), with certain limited exceptions as set forth in Part 17 of the FCC Rules and Part 77 of the FAA Rules, of any of the following construction or alterations of an antenna structure:

(1) Construction of any new antenna structure or alteration of any existing antenna structure, which would result in the top of the antenna or the antenna structure exceeding a height of 60.96 m (200 feet) above ground level at the antenna site.

(2) Construction of any new antenna structure or alteration of any existing structure, which would result in the top of the antenna or the antenna structure exceeding the height of an imaginary surface extending outward and upward at one of the following slopes:

(a) 100 to 1 for a horizontal distance of 6.10 kilometers (20,000 feet) from the nearest point of the nearest runway of each airport as specified in paragraph 3 (on the next page) with its longest runway no more than 0.98 kilometers (3,200 feet) in actual length, excluding heliport and seaplane bases without specified boundaries.

(b) 50 to 1 for a horizontal distance of 3.05 kilometers (10,000 feet) from the nearest point of the nearest runway of each airport specified in paragraph 3 (on the next page) with its longest runway no more than 0.98 kilometers (3,200 feet) in actual length, excluding heliport and seaplane bases without specified boundaries.

(c) 25 to 1 for a horizontal distance of 1.52 kilometers (5,000 feet) from the nearest point of the nearest landing and takeoff area of each heliport specified in paragraph 3 (on the next page).

(3) Any construction of an antenna structure (or any alteration of an antenna structure that would increase its height) on any of the following airports (including heliports):

(a) An airport that is available for public use and is listed in the Airport Directory of the current Airmen's Information Manual or in either the Alaska or Pacific Airmen's Guide and Chart Supplement.

(b) An airport under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration, and except for military airports, it is clearly indicated that the airport will be available for public use.

(c) An airport that is operated by an armed force of the United States.

(4) When requested by the FAA, any construction or alteration that would be in an instrument approach area (defined in the FAA standards governing instrument approach procedures) and available information indicates it might exceed an obstruction standard of the FAA.

If you intend to install towers of unusual height or at locations in close proximity to aircraft landing areas, it will be to your advantage to discuss the location and height of the antenna in detail with the appropriate FAA area office before filing your application.

Item F12 If item F11 was answered "Y" (yes), enter the date filing was made with the FAA.

Item F13 If item F11 was answered "Y" (yes), enter the name of the regional FAA office where the filing was made.

Item F14 If item F11 was answered "Y" (yes), enter the FAA assigned Aeronautical Study Number if known.

## SPECIFIC INSTRUCTIONS FOR SCHEDULE G

### Technical Data

Enter the Licensee Name, Radio Service and Call Sign or Station Location city and state.

LOC letters for items G1 through G8 correspond to LOC letters on Schedules E, F and H. Enter the LOC letter if other than letter A.

Item G1 Enter the specific frequency(ies) in megahertz. The requested frequency(ies) must be available in the Commission's rules governing the radio service in which you are seeking eligibility. Use a separate line for each frequency, except that 800 MHz SMRS mobile(s) and control(s) are now designated by frequency range "806-821" and 900 MHz SMRS mobile(s) and control(s) are now designated by frequency range "896-901". Use a different letter (A-F) for each permanent location and refer to Item G2 of these instructions for different classes of stations. When multiple frequencies are used at one station location, the LOC letter of the previous frequency must be entered.

Item G2 Enter the appropriate class of station code from the following table. Definitions for most of these items are listed in the Commission's rules.

### STATION CLASS CODE TABLE

Class of Station	Code
Base	FB
Mobile Relay	FB2
Community Repeater	FB4
Private Carrier (Profit)	FB6
Private Carrier (Non-Profit)	FB7
Control	*FX1
Mobile	MO
Mobile/Vehicular Repeater	MO3
Private Carrier Mobile Operation (Profit)	MO6
Private Carrier Mobile Operation (Non-Profit)	MO7
Operational Fixed	FX0
Fixed Relay	FX2
Fixed	**FX
Radiolocation Land	LR
Radiolocation Weather Radar	WDX
Radiolocation Mobile	MR
Secondary Fixed Signaling	FX3
(for 800 MHz only)	

\*Station associated with a mobile relay that employs the same frequency as the associated mobile station for control purposes.

\*\*Station operating on frequencies available for fixed use for control purposes in accordance with applicable rules.

NOTE: Where appropriate follow each code with "T" for Temporary, "I" for Itinerant, "S" for Standby, "C" for Interconnect, "J" for Temporary Interconnect, "K" for Standby Interconnect, and "L" for Itinerant Interconnect, (e.g., FBT meaning Temporary Base).

Item G3 Enter the number of actual transmitting units at each location. Normally, for a station at a permanent/fixed location (base, mobile relay, etc.) only one transmitter is involved; therefore, the number "1" should be entered on lines (A) through (F). However, if more than one transmitter is placed at the same location, so indicate. The total number of mobile units is normally the sum of the units to be placed in operation at the time of grant plus the units for which purchase orders have already been signed and will be in use within eight (8) months. There are some exceptions provided for in the rules which should be noted.

For this item vehicular, portable, aircraft, and marine units are considered to be mobiles. Paging receivers should not be counted as mobile units, but must be listed separately in Schedule D, Item D11.

Item G4 Enter the bandwidth and class of emission for each station. Normally, land mobile operations are intended to provide voice communications. The new ITU (International Telecommunications Union) emission designators must be used in place of the old designators. The following provides samples of the corresponding new ITU designators for the most commonly used emission designators.

### EMISSION DESIGNATORS

	Old	New
Frequency modulated (FM) voice	20F3	20K0F3E
Frequency modulated (FM) voice	13.6F3	13K6F3E
Frequency modulated digitized voice	20F3Y	20K0F1E
Frequency modulated digitized non-voice	20F9Y	20K0F1D
Amplitude modulated single sideband voice	3A3J	3K00J3E
Amplitude modulated (AM) voice	8A3	8K00A3E

**Item G5** When operating with single side band (A3J or new designator J3E) emission enter the peak envelope power, in Watts, followed by the letter "X" which represents peak envelope power in accordance with Appendix 1, ITU Radio Regulations. For operations using A0, A1, A2, A3, A9, F0, F1, F2, F3 and F9 emissions, or the following new emission designators N0N, A1A, A2D, A3E, A9W, F1B, F2D, F3E, and F9W, enter the mean RF output power, in Watts, normally supplied by the transmitter to the antenna feedline. (See applicable rules.)

NOTE: The power entered should be the minimum required for satisfactory operations.

**Item G6** This information is required, for operations above 10 MHz, from applicants requesting new station authorizations, and for major modifications described in the applicable rules.

Enter the effective radiated power (ERP). The ERP is the transmitter output power times the net gain of the antenna system. The net gain of the antenna system is the gain of the antenna minus the transmission losses which include losses attributable to the transmission line, duplexers, cavity filters and isolators. The actual formula is: ERP (watts) equals Power (watts) times Antilog (net gain in dB divided by 10).

**Item G7** For operations in 220-222 MHz and above 470 MHz, enter the height of the antenna above ground elevation for the average terrain. See the applicable rules for instructions for computing the height above average terrain for the antenna. All other applicants may omit this item.

**Item G8** Enter the overall height above ground to the nearest meter of the highest part of your antenna (antenna structure plus the height of the antenna, if top mounted; the total height to the tip of the antenna, if side-mounted). See antenna figures on Schedule F (a = antenna height to tip)

### SPECIFIC INSTRUCTIONS FOR SCHEDULE H Additional Antenna Data

**General:** All Remote Pick Up Broadcast Auxiliary Radio Service fixed location stations and all stations proposing to operate on frequencies below 27.5 MHz must complete Form 600 Schedule H. Failure to do so will result in the return of your application without further action. Land Mobile stations located near international borders that seek protection from interference should also complete Form 600 Schedule H. Form 600 Schedule H may be completed for all other stations if you believe the assumptions made by the FCC would leave your station insufficiently protected internationally. The assumptions are listed under International Registration for other than Parts 22 and 24 Applicants. If you do not provide the actual data and an interference problem arises involving another country's station, your station will be protected only to the limit of the FCC's assumptions. You may have to adjust. This is especially important for stations proposed to be operated in any of the state-counties listed in Appendix I to these instructions.

#### Instructions for Completion of Individual Items

Enter the Licensee Name, Radio Service and Call Sign or Station Location city and state.

LOC letters for items H1 - H5 correspond to LOC letters on Schedules E, F and G. Enter the station LOC letter code.

**Item H1** Enter the transmitter frequency in megahertz corresponding to the LOC letter codes (A,B,C,etc.) which uniquely define the station location identified on Schedule E. When multiple frequencies are used at one station location, the station location letter code of the previous frequency must be entered.

**Item H2** Enter the angle in the horizontal plane of the transmitting antenna main lobe measured clock-wise with respect to True North in degrees, or enter 360 to indicate the transmitting antenna is non-directional.

**Item H3** For directional antennas, enter the total angle in degrees measured horizontally in a plane containing the direction of maximum radiation within which the power radiated in any direction does not fall more than 3 dB below the power radiated in the direction of maximum radiation. This information should be available from the specification sheet included with the antenna at time of purchase.

**Item H4** Enter one of the code letters below representing the polarization of the transmitting antenna for those circuits above 27.5 MHz:

- E - Elliptical
- F - 45 Degrees
- H - Horizontal
- J - Linear
- L - Left hand circular
- R - Right hand circular
- S - Horizontal and Vertical
- T - Right and Left hand circular
- V - Vertical
- X - Other (Provide a description)

**Item H5** Enter the ratio, in decibels, of the power required at the input of loss-free reference antenna to the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same power flux-density at the same distance. This information should be available from the specification sheet included with the antenna at the time of purchase.

### INTERNATIONAL REGISTRATION (other than Part 22 and Part 24)

NOTICE: As a signatory party to international treaty agreements, the FCC performs certain actions regarding the use of radio. The technical details of your station parameters may be reported to the International Telecommunication Union, Geneva, Switzerland and to countries which border on or are in close proximity to the United States. This information along with data reported by other nations will be used to

protect reported stations and aid in resolution of interference disputes between licensees in different countries.

Certain stations, because of their geographic location, would be best protected by provision of additional information. Specifically, this includes any proposed station which is located in the region north of Line "A" as defined in Section 1.955 of FCC rules, or in the State of

Alaska east of Line "C". If the desired station is to operate in the 806-821/851-866, 821-824/866-869, 896-901/935-940 MHz bands, please consult the applicable rules for available frequencies and use near the United States/Canada/Mexico border.

Note: For control stations meeting the 20 foot criteria that require greater than 5 watts output power/ERP for operations in regions north of Line "A" or in Alaska east of Line "C", complete Schedule E items E1-E8 and Schedule G items G1-G6 and G8 as LOC letter A-F.

For your convenience and ease of determination, a list of all States and counties within those States above line "A", for which applicants may wish to submit additional information, has been included as Appendix I to these instructions. In addition, Schedule H has been developed for supplying this information. Because the operational characteristics for the majority of Land Mobile stations are quite similar, submission of all of the data requested by the ITU or other nations imposes a somewhat heavier burden on applicants than would seem necessary. NOTE: However, the form in which certain information is provided, can significantly benefit an applicant. In particular, mobile or temporary stations whose area of operation is defined in terms of a kilometer radius of specified geographical coordinates will provide for more accurate protection of these stations than defining their area of operation by some other means (See Items E9-E11 on the Form 600 Schedule E) and will expedite the coordination process where it is necessary.

Unless advised to the contrary, the FCC will make certain assumptions which reflect the typical station in these services. Carefully review the list below with respect to your particular situation. If you believe that these assumptions would leave your station insufficiently protected, provide the correct data on Form 600 Schedule H and attach it with your application. If you do not provide the actual data and an interference problem arises involving another country's station, your station will be protected only to the limit of the FCC's assumptions.

The following station parameters will be assumed unless otherwise stated:

1. **Antenna Polarization.** All stations will be reported as having antennas with vertical polarization.
2. **Antenna Gain.** The antenna gain for all stations will be assumed to be 6 dB.
3. **Antenna Azimuth of Main Lobe.** We will report each base or mobile relay station as having an omnidirectional (360 degrees) azimuth. We will assume that each control station associated with a mobile relay station has a directional antenna with its azimuth of maximum radiation directed toward the mobile relay station.
4. **Beamwidth.** Where an omnidirectional antenna is assumed, beamwidth has no relevance, and therefore, no assumed value will be used. For control stations we will assume 20 degrees.
5. **Class of Operation for HF Fixed Stations.** All HF Fixed applicants must file Form 600 Schedule H. Therefore no assumption will be made.
6. **Receiver Information.** All stations specified on the same application form are assumed to be communicating with each other as a system. Receivers will be assumed to operate at the same location as the transmitter. In other words, we will assume that the receiver site for a mobile station transmission is the location of the associated base station. The receiver site for a base station transmission will be assumed to be the area of operation of the associated mobile stations. For a control station transmission, the location of the associated mobile relay station is the location of the receiver.
7. **Control stations meeting the 20 foot criteria that are operating in the region north of Line "A" or in Alaska east of Line "C" will not be coordinated with Canada unless Schedule E items E1 - E8 and Schedule G items G1 - G6 and G8 are completed as LOC letter A - F. The ERP will be limited to 5 watts if the fixed location is not provided for controls meeting the 20 foot criteria operating in these areas.**

# Appendix I

List of Counties, by State, having areas North of Line A:

## IDAHO

Bonner  
Boundary  
Shoshone

## INDIANA

Allen  
De Kalb  
Steuben

## MAINE

Aroostook  
Franklin  
Hancock  
Kennebec  
Oxford  
Penobscot  
Piscataquis  
Somerset  
Waldo  
Washington

## MICHIGAN

Alcona  
Alger  
Alpena  
Antrim  
Arenac  
Baraga  
Bay  
Branch  
Calhoun  
Charlevoix  
Cheboygan  
Chippewa  
Claire  
Clinton  
Crawford  
Delta  
Dickinson  
Eaton  
Emmett  
Genesee  
Gladwin  
Gogebic  
Gratiot  
Hillsdale  
Houghton  
Huron  
Ingham  
Ionia  
Iosco  
Iron  
Isabella  
Jackson  
Kalkaska  
Keweenaw  
Lapeer  
Leelanau  
Lenawee  
Livingston  
Luce  
Mackinac  
Macomb  
Marquette  
Menominee

Midland  
Missaukee  
Monroe  
Montcalm  
Montmorency  
Oakland  
Ogemaw  
Ontonagon  
Oscoda  
Otsego  
Presque Isle  
Roscommon  
Saginaw  
Sanilac  
Schoolcraft  
Shiawassee  
St. Clair  
Tuscola  
Washtenaw  
Wayne

## MINNESOTA

Beltrami  
Carlton  
Clearwater  
Cook  
Itasca  
Kittson  
Koochiching  
Lake  
Lake of the  
Woods  
Marshall  
Pennington  
Polk  
Roseau  
St. Louis

## MONTANA

Blaine  
Chouteau  
Daniels  
Flathead  
Glacier  
Hill  
Lake  
Liberty  
Lincoln  
McCone  
Phillips  
Pondera  
Richland  
Roosevelt

Sanders  
Sheridan  
Teton  
Toole  
Valley

## NEW HAMPSHIRE

Carroll  
Coos  
Grafton

## NEW YORK

Alleghany  
Cattaraugus  
Cayuga  
Chautaugua  
Clinton  
Erie  
Essex  
Franklin  
Genesee  
Hamilton  
Herkimer  
Jefferson  
Lewis  
Livingston  
Madison  
Monroe  
Niagara  
Oneida  
Onondaga  
Ontario  
Orleans  
Oswego  
Seneca  
Steuben  
St. Lawrence  
Warren  
Washington  
Wayne  
Wyoming  
Yates

## NORTH DAKOTA

Benson  
Bottineau  
Burke  
Cavalier  
Divide  
Grand Forks  
McHenry  
McKenzie  
Mountrail  
Nelson  
Pembina  
Pierce  
Ramsey  
Renville  
Roulette  
Towner  
Walsh  
Ward  
Williams

## OHIO

Ashland  
Ashtabula  
Cuyahoga  
Defiance  
Erie  
Fulton  
Geauga  
Hancock  
Henry  
Huron  
Lake  
Lorain  
Lucas

Medina  
Ottawa  
Paulding  
Portage  
Putnam  
Sandusky  
Seneca  
Summit  
Trumbull  
Williams  
Woods

## PENNSYLVANIA

Crawford  
Erie  
Warren

## VERMONT

Addison  
Caledonia  
Chittenden  
Essex  
Franklin  
Grand Isle  
Lamoille  
Orange  
Orleans  
Rutland  
Washington  
Windsor

## WASHINGTON

Chelan  
Clallam  
Douglas  
Ferry  
Grays Harbor  
Island  
Jefferson  
King  
Kitsap  
Mason  
Okanogan  
Pend Oreille  
Pierce  
San Juan  
Skagit  
Snohomish  
Spokane  
Stevens  
Whatcom

## WISCONSIN

Ashland  
Bayfield  
Douglas  
Florence  
Forest  
Iron  
Vilas



## Appendix II

### Commission Field Offices

The Commission's field offices and the zip codes are listed below. Correspondence with the field offices should be addressed to: Federal Communications Commission, Engineer-in-Charge. The street address of any office may be found in the local directory, for the city in which the office is located, under the heading United States Government.

#### ALASKA

Anchorage 99502-1896

#### ARIZONA

Douglas 85608-0006

#### CALIFORNIA

San Diego 92111-2216

Livermore 94551-0311

Cerritos 90701-3684

Hayward 94545-1914

#### COLORADO

Lakewood 80228-2213

#### FLORIDA

Vero Beach 32961-1730

Miami 33166-4668

Tampa 33607-2356

#### GEORGIA

Duluth 30136-4958

Powder Springs 30073-0085

#### HAWAII

Waipahu 96797-1030

#### ILLINOIS

Park Ridge 60068-1460

#### LOUISIANA

New Orleans 70123-3333

#### MAINE

Belfast 04915-0470

#### MARYLAND

Baltimore 21201-2802

Columbia 21045-9998

#### MASSACHUSETTS

Quincy 02169-7495

#### MICHIGAN

Allegan 49010-9437

Farmington Hills 48335-1552

#### MINNESOTA

St. Paul 55101-1467

#### MISSOURI

Kansas City 64133-4895

#### NEBRASKA

Grand Island 68802-1588

#### NEW YORK

Buffalo 14202-2398

New York 10014-4870

#### OREGON

Portland 97204-2898

#### PENNSYLVANIA

Langhorne 19047-1859

#### PUERTO RICO

Hato Rey 00918-1731

#### TEXAS

Dallas 75243-3429

Houston 77008-1775

Kingsville 78363-0632

#### VIRGINIA

Virginia Beach 23455-3725

#### WASHINGTON

Custer 98240-9303

Kirkland 98034-6927